

REMARKS

Claims 1-9 currently appear in this application. The Office Action of February 25, 2005, has been carefully studied. These claims define novel and unobvious subject matter under Sections 102 and 103 of 35 U.S.C., and therefore should be allowed. Applicants respectfully request favorable reconsideration, entry of the present amendment, and formal allowance of the claims.

Drawings

The drawings are objected to because numerical indicator 10 has not been illustrated.

Submitted herewith is a replacement sheet for Figure 1 showing numerical indicator 10.

The drawings are objected to because numerical indicator 12 lacks a written description. .

The specification has been amended to include a written description of numerical indicator 12.

The drawings are objected to under 37 CFR 1.121(d) for not showing a water-impermeable cover.

Claim 10 has been cancelled.

Rejections under 35 U.S.C. 112

Claim 10 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement and the enablement requirement.

These rejections are now moot, as claim 10 has been cancelled.

Art Rejections

Claims 1, 5, 7, 8 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Groves.

This rejection is respectfully traversed. The claims have been amended to recite that the shock attenuating material has the flow properties of a liquid. Support for this amendment can be found in the specification as filed at page 9, paragraph 23, and page 10, paragraph 24. Groves, on the other hand, requires that there be two layers of beads tightly confined between the layers of flexible material (column 2, lines 24-31). The beads in Groves are tightly packed, unlike the flowable material in the present application.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Groves in view of Andersen et al.

This rejection is respectfully traversed. Andersen merely discloses that perlite can be used as an aggregate filler to produce laminates having the desired physical properties. In this case, Andersen incorporates the perlite in the sheets that form the laminate, not as something confined within the cells of the honeycomb structure. Thus, Andersen is not using perlite as a shock attenuating material which has the flow properties of a liquid. Andersen uses perlite as a filler for a material used for forming a sheet for a laminate. A filler for a plastic sheet cannot possibly have the flow properties of a liquid, as the filler is

completely surrounded by the material which makes up the sheet and is incorporated therein so that it is not free to move. The assembly of the present invention, however, has the shock attenuating material encased in cells or recesses, wherein the shock attenuating material can flow freely within the cells or recesses.

Claims 1, 5 and 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Pfisterhammer.

This rejection is respectfully traversed. The sheets of Pfisterhammer, 19, 19' and 19", comprise a plurality of laminations of the basic material, provided with closely adjacent depressions and elevations. This is not at all like the present invention, in which cells or recesses are formed in the space between the sheets. In Pfisterhammer the basic material is made of at least in part of a component of great strength and ductility, such as steel, aluminum or the like (column 1, lines 15-20). The basic material is formed in such a way as to provide curved lines of stress in every direction of stress of the structure. The mineral matter, 22, is merely said to be granules of uniform size. There is no indication that these granules have the flow properties of a liquid, as required by the present claims. In fact, in Pfisterhammer the filler material preferably has a high degree of hardness and a high coefficient of friction (column 5, lines 17-49).

The filler material of Pfisterhammer is used to slow an entering projectile, such as a bullet. The outer layers of Pfisterhammer are preferably components of great strength and ductility, such as steel, aluminum, or the like, or a polyamide. The basic material is formed so as to provide curved lines of stress in every direction of stress of the

structure. This is not at all the same as the flexible sheets of the present invention.

Claims 1 and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Butterweck et al.

This rejection is respectfully traversed. Butterweck et al. disclose a protective shielding made of plates 4 which are inserted into a rubber frame. The plates are made of perforated steel. The shock attenuating material 4 of Butterweck et al. is a steel plate with holes in it, not a shock attenuating material that has the flow properties of a liquid.

Claims 1, 2, 5 and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Symons.

This rejection is respectfully traversed. Symons discloses a composite panel comprising sheets of a natural fiber material, each sheet having been impregnated with a liquid composition comprising a thermosetting resin, and extending liquid for the thermosetting resin, and a catalyst. Submitted herewith is a page from Chemindustry.com, in which a thermosetting resin is described as a material that hardens when heated under pressure, but from then on cannot be molded or melted without ruining its original properties. That is, the panel of Symons is a rigid or hard panel with a cellular core. This panel is not at all the same as an assembly comprising two flexible sheets, as a panel would not be a flexible assembly.

The Examiner has cited Figures 4, 7 or 9 of Symons as anticipating two flexible sheets. Figure 4 of Symons shows a composite panel comprising a first sheet 20 and a second

sheet 22 formed from impregnated corrugated cardboard or Kraft paper, and sandwiched there between a core. It is clear that this is not an assembly of two flexible sheets, as the cardboard or Kraft paper impregnated with a thermosetting resin would be rigid, which is a characteristic desired in a panel.

Figure 7 shows a composite panel comprising a first sheet and a second sheet formed from corrugated cardboard impregnated with a liquid composition and having sandwiched therebetween a core, each of the cells of the core being filled with a filler composition. The liquid composition is defined at column 1, lines 31-33, as a thermosetting resin. Thus, the panel shown in Figure 7 is also rigid, unlike the herein claimed assembly.

Figure 9 also shows a composite panel comprising a first sheet and a second sheet of a multiply Kraft paper impregnated with a liquid composition. Because the liquid composition is thermosetting, this pane would be rigid, unlike the flexible assembly of the present invention.


It is noted that the art made of record is considered to be merely pertinent to the present disclosure.

In view of the above, it is respectfully submitted that the claims are now in condition for allowance, and favorable action thereon is earnestly solicited.

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Respectfully submitted,

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